



ICL Group's

# Energy Management Approach and Methods 2024

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# ICL Group's Energy Management Approach and Methods 2024

## Introduction

ICL Group has been systematically monitoring and reporting its Energy consumption. The Monitoring, Reporting, and Verification (MRV) program and this supporting document have been prepared in accordance with GRI 302: Energy 2016 of the Global Reporting Initiative, Disclosure 302-1: Energy consumption within the organization. The document is intended to provide a framework and reference for the data management approach utilized by ICL Group, developed to ensure reasonable accuracy and integrity of energy consumption data collection, calculation, assurance and reporting.

ICL Group intends to release the information listed above to its interested stakeholders as part of its public disclosures and through direct communications, on a case-by-case basis with interested parties, such as: customers, regulators, analysts, ESG rating agencies and investors.



# A | Company Description

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## Overview

ICL Group Ltd. is a leading global specialty minerals company, which creates impactful solutions for humanity's sustainability challenges in the food, agriculture, and industrial markets. ICL leverages its unique bromine, potash, and phosphate resources, its global professional workforce, and its sustainability focused R&D and technological innovation capabilities, to drive the ICL's growth across its end markets. For more information, please see ICL Group's 2024 audited Annual Financial Report.

## Structure, Markets and Industries

ICL Group's integrated business model is mainly structured around three mineral value chains - bromine, potash and phosphate. These minerals are the main raw materials for most of the value-added downstream products in the company's portfolio. Its operations are organized under four reporting segments: Industrial Products (bromine), Potash, Phosphate Solutions and Growing Solutions. The segments represent a specific value chain in which ICL Group holds a leading position - either in terms of market share or cost competitiveness.

The Industrial Products segment primarily operates the bromine value chain, which includes elemental bromine and bromine compounds for various industrial applications. This segment also operates several complementary businesses, mainly phosphorous-based flame retardants and additional Dead Sea minerals for the pharmaceutical, food, oil and gas, and de-icing industries.

The Potash segment operates the potash value chain and includes primarily potash fertilizers and the magnesium business, a byproduct of potash production, which produces and sells pure magnesium and magnesium alloys, as well as chlorine and sylvinitite.

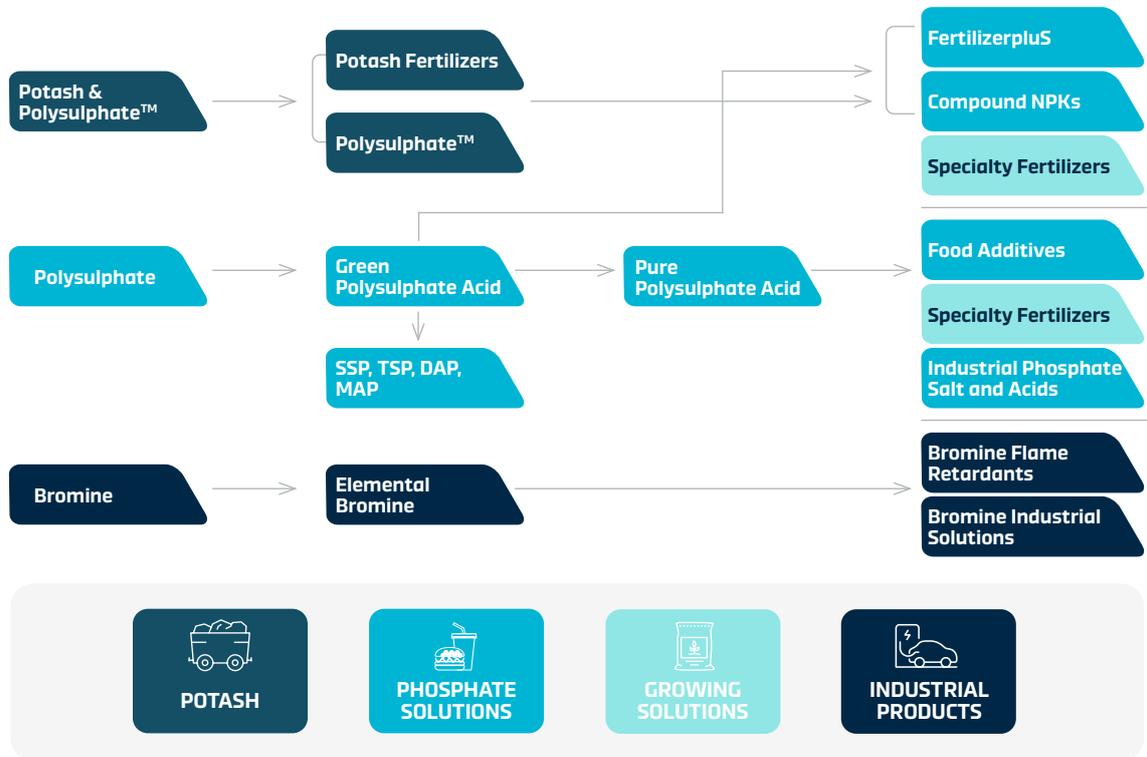
The Phosphate Solutions segment is based on the phosphate value chain. It includes specialty phosphate salts and acids for various food and industrial applications, as well as commodity phosphates, which are used mainly as fertilizers.

The fourth segment, Growing Solutions, includes the specialty fertilizers business. ICL Group is focused on expanding and strengthening its Growing Solutions offerings, by maximizing its existing capabilities and agronomic expertise. The stated strategy calls for expansion and global diversification through opportunistic M&A and, accordingly in 2024, ICL Group integrated new acquisitions Nitro 1000, a Brazilian manufacturer, developer and provider of biological crop inputs that replace or optimize the use of fertilizers. In addition, in July 2024, ICL completed the acquisition of Custom Ag Formulators, a North American provider of agriculture formulations and products customized for growers. CAF offers a diverse assortment of liquid adjuvants and enhanced nutrients, as well as various other specialty products.

# A | Company Description

## Structure, Markets and Industries

### Value Chain



## B | Organizational Boundaries

Data necessary for calculating energy consumption was collected from the operations listed below, including all of ICL Group's manufacturing facilities and major logistical operations.

**Table 1: List of properties**

 Site Name	 Site location	 Country	 Business Segment	 Primary Activity
ICL Brazil São José dos Campos- SJDC	Sao Jose dos Campos	 Brazil	<b>Phosphates</b>	Manufacturing plant
ICL Brazil Cajati	Cajati	 Brazil	<b>Phosphates</b>	Manufacturing plant
ICL America do Sul Cruz alta	Cruz alta	 Brazil	<b>Growing Solutions</b>	Manufacturing plant & research facility
ICL America do Sul Conchal	Conchal	 Brazil	<b>Growing Solutions</b>	Research facility
ICL America do Sul Cidade Ocidental	Cidade	 Brazil	<b>Growing Solutions</b>	Manufacturing plant
ICL America do Sul Iracemápolis	Iracemápolis	 Brazil	<b>Growing Solutions</b>	Research facility
ICL America do Sul Mauá	Mauá	 Brazil	<b>Growing Solutions</b>	Manufacturing plant
ICL America do Sul Uberlândia	Uberlândia	 Brazil	<b>Growing Solutions</b>	Manufacturing plant
ICL America do Sul Suzano 1	Suzano	 Brazil	<b>Growing Solutions</b>	Manufacturing plant
ICL America do Sul Suzano 2	Suzano	 Brazil	<b>Growing Solutions</b>	Manufacturing plant
ICL America do Sul Jacarei 1	Jacarei	 Brazil	<b>Growing Solutions</b>	Manufacturing plant
ICL America do Sul Jacarei 2	Jacarei	 Brazil	<b>Growing Solutions</b>	Manufacturing plant
ICL U.S. Carondelet	Carondelet, Missouri	 United States	<b>Phosphates</b>	Manufacturing plant
ICL U.S. Charleston	North Charleston, South Carolina	 United States	<b>Growing Solutions</b>	Manufacturing plant

## B | Organizational Boundaries

Table 1: List of properties

 Site Name	 Site location	 Country	 Business Segment	 Primary Activity
ICL U.S. Gallipolis Ferry	Gallipolis Ferry, West Virginia	 United States	<b>Industrial Products</b>	Manufacturing plant
ICL U.S. Lawrence	Lawrence, Kansas	 United States	<b>Phosphates</b>	Manufacturing plant
ICL U.S. Summerville	Summerville, South Carolina	 United States	<b>Growing Solutions</b>	Manufacturing plant. Currently inactive with minimal activity required to support necessary services.
ICL U.S. Indiana (Hammond)	Hammond, Indiana	 United States	<b>Phosphates</b>	Technical Center
ICL China Shandong (SBCL)	Shandong	 China	<b>Industrial Products</b>	Manufacturing plant
ICL China Shanghai Tari (STI)	Shanghai	 China	<b>Phosphates</b>	Manufacturing plant. Currently inactive with minimal activity required to support necessary services.
ICL China TCKG, YBKGT	Yunnan	 China	<b>Phosphates</b>	Manufacturing plant
ICL China YPH 3C & Haikou	Kunming, Yunnan	 China	<b>Phosphates</b>	Manufacturing plant
ICL Australia Fibrisol	Heatherton	 Australia	<b>Phosphates</b>	Manufacturing plant
ICL Austria Hartberg (Prolactal)	Hartberg	 Austria	<b>Phosphates</b>	Manufacturing plant
ICL Belgium (NU3)	Belgium	 Belgium	<b>Growing Solutions</b>	Manufacturing plant
ICL France Caffiers (Scora)	Calais	 France	<b>Industrial Products</b>	Manufacturing plant
ICL Germany Amfert	Ludwigshafen	 Germany	<b>Growing Solutions</b>	Manufacturing plant
ICL Germany Ladenburg (BK Giuliani GmbH)	Ladenburg	 Germany	<b>Phosphates</b>	Manufacturing plant
ICL Iberia Fuentes (Patojos)	Cartagena	 Spain	<b>Growing Solutions</b>	Manufacturing plant

## B | Organizational Boundaries

Table 1: List of properties

 Site Name	 Site location	 Country	 Business Segment	 Primary Activity
ICL Iberia Fuentes (Totana)	Totana	 Spain	<b>Growing Solutions</b>	Manufacturing plant
ICL Iberia Fuentes (Escombreras)	Cartagena	 Spain	<b>Growing Solutions</b>	Warehouse and loading facility
ICL Iberia Sallent	Sallent, Catalonia	 Spain	<b>Potash</b>	Manufacturing plant
ICL Iberia Súrria	Catalonia, Súrria	 Spain	<b>Potash</b>	Manufacturing plant
ICL Netherlands Amfert	Amsterdam	 Netherlands	<b>Growing Solutions</b>	Manufacturing plant
ICL Netherlands Heerlen	Heerlen	 Netherlands	<b>Growing Solutions</b>	Manufacturing plant
ICL Netherlands Terneuzen	Terneuzen	 Netherlands	<b>Industrial Products</b>	Manufacturing plant
ICL Turkey Rotem	Bandırma	 Turkey	<b>Growing Solutions</b>	Manufacturing plant. Currently inactive with minimal activity required to support necessary services.
ICL U.K. Amega	Daventry	 United Kingdom	<b>Growing Solutions</b>	Manufacturing plant
ICL U.K. Boulby	Cleveland	 United Kingdom	<b>Growing Solutions</b>	Manufacturing plant
ICL U.K. London (Fibrisol)	London	 United Kingdom	<b>Industrial Products</b>	Manufacturing plant
ICL U.K. Nutberry	Nutberry	 United Kingdom	<b>Growing Solutions</b>	Manufacturing plant
ICL Germany Bitterfeld	Bitterfeld	 Germany	<b>Industrial Products</b>	Manufacturing plant
Dead Sea Bromine (DSB)	Sodom	 Israel	<b>Industrial Products</b>	Manufacturing plant
Dead Sea Magnesium (DSM)	Sodom	 Israel	<b>Potash</b>	Manufacturing plant

## B | Organizational Boundaries

**Table 1: List of properties**

 Site Name	 Site location	 Country	 Business Segment	 Primary Activity
Dead Sea Works (DSW)	Sodom	 Israel	<b>Potash</b>	Manufacturing plant
ICL DSS - Chem. Division	Sodom	 Israel	<b>Industrial Products</b>	Manufacturing plant
ICL Haifa (F&C)	Kiryat Ata	 Israel	<b>Growing Solutions</b>	Manufacturing plant
ICL Haifa IMI	Kiryat Ata	 Israel	<b>Phosphates</b>	Laboratories
ICL Neot-Hovav	Neot Hovav	 Israel	<b>Industrial Products</b>	Manufacturing plant
ICL Periclase	Mishor Rotem	 Israel	<b>Industrial Products</b>	Manufacturing plant
ICL Rotem Oron	Oron	 Israel	<b>Phosphates</b>	Manufacturing plant
ICL Rotem Site	Mishor Rotem	 Israel	<b>Phosphates</b>	Manufacturing plant
ICL Rotem Zin	Zin	 Israel	<b>Phosphates</b>	Manufacturing plant. Currently inactive with minimal activity required to support necessary services.
ICL Sdom CHP	Sdom, Israel	 Israel	<b>Potash</b>	Power plant
ICL T&L Sherut (Sherut-Integrated Transportation)	Ashdod	 Israel	<b>Growing Solutions</b>	Transport & Logistics
ICL T&L Tovala (Mifalei Tovala)	Ashdod	 Israel	<b>Growing Solutions</b>	Transport & Logistics

ICL Group has made the efforts to collect and aggregate data from all the operations listed above for all relevant energy sources. Any exceptions are detailed below.

## C | Sources

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### **ICL Group's 2024 sources of energy consumption and energy sold include:**

- ✓ Fuel consumption within the organization from non-renewable and low carbon sources
- ✓ Fuel consumption within the organization from renewable sources
- ✓ Electricity consumption (from non-renewable, renewable and low-carbon sources)
- ✓ Steam consumption (from non-renewable, renewable and low-carbon sources)
- ✓ Self-generated energy consumption
- ✓ Heating / cooling consumption if relevant (from non-renewable, renewable and low-carbon sources)
- ✓ Electricity sold
- ✓ Heating / cooling / steam sold

## D | Reporting Period

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1 January 2024 – 31 December 2024.

## E | Organization's Energy Management policy and responsibility

ICL approved an updated Energy Policy in 2024.

### ICL'S ENERGY POLICY

ICL acts to create impact for a sustainable future, by implementing responsible practices in all lines of its operations.

We aim to do the right thing, in the right way, every day, by embracing the UN Sustainable Development Goals (SDG's) as our guiding principles and implementing them in everything we do. ICL's Energy Policy supports the following SDG's:



### ENERGY IS KEY

ICL's Energy Policy is driven by our commitment to sustainability, operational excellence, and responsible energy management. We aim to reduce energy consumption, increase the use of renewable energy, and achieve significant cost savings, while enhancing our energy security and independence. By prioritizing energy efficiency and renewable sources, we seek to minimize our environmental impact, enhance productivity, and create long-term value.

### GOVERNANCE

Our energy management is part of our climate-related strategy, that embodies a robust governance framework aligned with ICL's corporate and ESG governance structure and practices. ICL's CRO, a senior executive and member of ICL's T15 forum, is responsible for executing ICL's overall energy management and cascading it top-down. The policy in its entirety is monitored by ICL's energy and sustainability teams.

At the apex of this governance framework is our board of directors, supported by the Climate, Sustainability and Community Relations Committee (the CSC Committee). The CSC Committee is responsible for overseeing ICL's activities, ensuring that the necessary policies, systems, and personnel are in place to support safe, sustainable operations and the long-term viability of the Company. This includes key areas such as energy management, strategy, performance, and stewardship. Chaired by a board member with extensive environmental expertise, the CSC Committee provides focused attention to this critical domain and reports directly to our board of directors.

Additionally, the Management's Global Executive Committee (GEC) has appointed the GEC's Sustainability Committee as an advisory committee. This Committee is tasked with better monitoring and overseeing ICL's sustainability, climate and ESG related matters, including energy management, strategy, performance, and risk management.

## E | Organization's Energy Management policy and responsibility

### KEY PRINCIPLES COMMITMENTS & GOALS

- By 2030, a reduction of 30% (GHG) emissions (scope 1&2) vs. baseline year.
- Commitment to the Science Based Targets initiative (SBTi) in setting an ambitious decarbonization plan, that will include raising the bar on targets set to date.
- By 2040, to increase the share of renewable energy consumption to 50% over the baseline year.
- Continuously aiming to reduce energy usage and increasing energy efficiency, by enhancing innovative solutions, upgrading control, and implementing new technologies.
- By 2050, to become carbon neutral.
- Promoting systematic energy efficiency, requiring all relevant ICL sites (operational and production sites) to uphold international standards of Energy Management Systems and certify their systems according to ISO 50001 Energy standard.
- Initiating and implementing efficiency programs, such as our global "Ambition Creates Excellence" program, across all our operations to ensure responsible and efficient energy management, with the goal of reducing consumption.
- Monitoring and managing our energy consumption and operational efficiency enhancements.
- Defining and strictly monitoring energy efficiency requirements for procurement and on-boarding of new equipment.
- Encouraging energy efficiency and good energy practices with GHG management throughout our supply chain.
- Continuously improving our energy mix by increasing renewable energy and low-carbon energy sources, and decommissioning fossil fuel-based energy sources, including striving to expand our EV fleet and increasing renewable energy installations across our operations.
- Creating transparency regarding our energy performance, by reporting energy and greenhouse gas emissions related information verified by a 3rd party on annual bases.
- Reviewing and monitoring our energy objectives and targets annually, including establishing annual KPIs for our executive management, that incorporate improvement in energy related targets, such as achieving savings or energy consumption reductions through efficiency programs and increasing our share of renewable energy and low-carbon energy sources.
- Reporting our targets and allocating the adequate resources to achieve them.
- Communicating energy related matters with our internal and external stakeholders.
- Implementing energy related efforts aiming to mitigate and adapt to Climate Change, as well as to achieve emission reductions by energy efficiency improvements and use of renewable energy sources, all as part of ICL's decarbonization plan.
- Demonstrating commitment to continuous innovation and exploration of new opportunities to develop sustainable energy products and solutions that drive energy transition forward, supporting the global shift towards renewable energy sources.

This Energy Policy underscores our commitment to responsible energy management and sustainability across our operations and supply chain. By collaborating with our partners and stakeholders, we will collectively aim to achieve our energy efficiency objectives while minimizing environmental impact and promoting sustainable practices.

#### **SPEAK UP**

ICL promotes a culture of Speak Up that appreciate the importance in allowing employees to raise their voices and speak up without any fear of retaliation. Therefore, we encourage anyone who knows or suspects any violation of this Policy and related procedures and/or ICL's Code of Conduct, or any other potential misconduct to speak up and report it. For the complete policy please see: <https://www.icl-group.com/wp-content/uploads/2024/05/ICL-Energy-Policy-Rev5-5.2020.pdf>

## F | Measuring & reporting approach

ICL Group has followed GRI 302: Energy 2016 of the Global Reporting Initiative, Disclosure 302-1: Energy consumption within the organization. Energy consumption is reported in Joules or multiples and MWh (megawatt/hour) or multiples.

To support the growing needs regarding ESG metrics, disclosures and analysis, ICL group is in the midst of characterizing and digitizing the broad range of activity data required for ESG monitoring, reporting and assurance. ICL utilizes an environmental data management system powered by ECO-OS as a single-point-of-record for the various regulatory and voluntary tasks.

## G | Calculation Methods for Energy Consumption

### Energy consumption

Activity data is managed at both regional, local and operational level. Energy procurement and energy data tracking have centralized regional teams for sites in Europe and in Israel. In other regions the data is managed on site.

### Total Energy Consumption (Gross)

Energy consumption (Gross) includes energy for stationary and mobile fuel combustion, as well as on-site production of energy. Indirect energy consumption includes consumption of purchased electricity, steam, heating and cooling.

### Total Energy Consumption (Net)

Energy consumption includes energy for stationary and mobile fuel combustion, as well as on-site production of energy. Indirect energy consumption includes consumption of purchased electricity, steam, heating and cooling. It excludes energy (electricity, heating, cooling, and steam) that ICL sells. The amount of energy sold is subtracted from the Total consumption as indicated by GRI Disclosure 302-1: Energy consumption within the organization.

### Low Carbon

Low carbon energy consumption includes energy that is not sourced from fossil fuels but is not necessarily considered as renewable. This includes sources such as hydrogen byproduct from chemical reactions and waste-heat.

### Waste heat

We recognize the growing global consensus considering Waste Heat Recovery (WHR) as an essential energy source for improving energy efficiency and advancing decarbonization. As there is yet to be a global resolution regarding the classification of waste-heat as renewable or non-renewable energy, we have taken a conservative approach by classifying energy from WHR, derived from the exothermic reaction and additional heat recovery process in selected production processes, as a low low-carbon energy source, therefore, it is not included in our renewable energy sources category. This approach considers the different definitions and classifications across countries, regions and standards considering waste heat as a renewable or non-renewable energy source. We continue to monitor the different approaches and may update our classification as the situation evolves.

## G | Calculation Methods for Energy Consumption

The CDP also specifically mentions the exothermic reaction that takes place in some of ICL's production process as a source for waste-heat.

"Companies that recover waste heat/gases generated from the consumption of fuel feedstocks in a primary industrial process and utilize the waste heat/gases to produce energy in a secondary process should report the consumption of the recovered waste heat/gases in this row, in column 5 "MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary". An example of such a process is the recovery of the excess heat from the exothermic reaction in the process of sulfuric acid production." (CDP 7.30.3)

### Renewable Energy

Renewable energy consumption includes sources such as electricity with Energy Attribute Certificates (EACs), biodiesel, onsite renewable energy, steam from renewable sources and wood and woodchips.

ICL Group's disclosure of the amount of energy in GJ and MWh consumed includes those from all sources mentioned under section C. Sources.

Data used in the energy consumption calculations for ICL sites that generate material amounts of energy from waste heat recovery from the exothermic reaction of selected production processes, is based on internal direct measurements.

## H | Data Availability, Exclusions and Uncertainties

- **Acquisition of new assets.** New industrial operations in Brazil (ICL America do Sul) were acquired and owned by ICL Group over the course of 2021 fiscal year. Their emissions were first recorded in the 2022 Scope 1 & 2 emissions report and are included in this current report as well. However, these sites were not under ICL operational control during the baseline year being used by ICL to set its decarbonization targets. Thus, ICL is also reporting its total emissions on a same-site basis in various official communications, clearly stating the distinction and always alongside the total amount of emissions for the company. During 2024, ICL acquired Nitro 1000, a Brazilian manufacturer, developer and provider of biological crop inputs that replace or optimize the use of fertilizers. In addition, ICL completed the acquisition of Custom Ag Formulators, a North American provider of agriculture formulations and products customized for growers. The environmental data of these sites will be integrated into ICL inventory starting 2025. No significant impact on GHG balance is expected.
- **Site-specific limitations.** ICL U.S. Summerville, USA has been inactive in 2024 therefore no energy consumption is expected in this site. During 2024, ICL Turkey Rotem has been partially inactive with minimal activity required to support necessary services.

## I | Key Resources

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### Standards and Guidance

- [1] GRI 302: Energy 2016 of the Global Reporting Initiative, Disclosure 302-1: Energy consumption within the organization <https://www.globalreporting.org/standards/download-the-standards/>
- [2] CDP 7.30.3 Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

### Additional Sources

- [3] ICL Group Energy Policy <https://www.icl-group.com/wp-content/uploads/2024/05/ICL-Energy-Policy-Rev5-5.2020.pdf>
- [4] Defining and accounting for waste heat and cold
  - Lyons, L., Kaccadias, K. and Carlsson, J., JRC Technical Report - Defining and accounting for waste heat and cold. Joint Research Centre. 2021 (EUR 30869 EN).
  - Jones, N., Waste Heat: Innovators Turn to an Overlooked Renewable Resource. Yale Environment 360. 2018. <https://e360.yale.edu/features/waste-heat-innovators-turn-to-an-overlooked-renewable-resource>

### Disclaimer

The Company has made good faith and reasonable efforts to ensure the accuracy of the information presented in this energy management methodology disclosure.

This report and associated materials have been prepared utilizing international and industry standard methodologies to describe our approach towards the calculations of energy consumption. Although the Company believes the report and its information to be reliable, neither a guarantee, nor a warranty express or implied is made regarding the information provided, as it may be subject to updates and revisions as additional information becomes available in the future or certain third-party data required for the preparation of this report is amended. While we strive to use reputable sources, the Company is not responsible for the accuracy or reliability of third-party data, and no endorsement or warranty is provided for such information. The information provided herein is not intended to be a substitute for any technical, regulatory, legal or other professional advice, in any relevant jurisdiction, on any subject matter.